

REMARKS

In the Office Action, claims 14-26 are rejected. More specifically, claims 14-16 and 18-26 are rejected under are rejected under 35 U.S.C. §102 in view of U.S. Patent No. 6,792,398 (“Handley”). Claim 17 is rejected under 35 U.S.C. §103 in view of Handley and further in view of U.S. Patent No. 5,418,712 (“Miwa”). Applicants believe that these rejections are improper based on at least the reasons set forth below.

Of the pending claims at issue, claims 14, 20 and 26 are the sole independent claims. Claim 14 recites a three-dimensional model processing apparatus. The three-dimensional model processing apparatus includes display means for displaying an object, an object tool representing the displayed object wherein the object tool is adapted to be manipulated in three dimensions such that the position and orientation of the object tool can be changed, an editing tool adapted to be manipulated in three dimensions such that a relative position between the editing tool and the object tool can be changed, and processing means for detecting relative position information corresponding to the relative position between the editing tool and the object tool, and executing processing determined by the editing tool to modify attribute information of the displayed object on the basis of the detected relative position information, thereby altering the appearance of the displayed object.

Claim 20 recites a three-dimensional model processing method for executing various processing. The three-dimensional model processing method includes providing an object displayed on a display means, providing an object tool representing the displayed object wherein the object tool is adapted to be manipulated in three dimensions such that the position and orientation of the object tool can be changed, providing an editing tool adapted to be manipulated in three dimensions such that a relative position between the editing tool and the object tool can be changed, detecting relative position information corresponding to the relative position between the object tool and the editing tool, executing processing determined by the editing tool to modify attribute information of the displayed object on the basis of the detected relative position information, and updating the appearance of the displayed object based on the modified attribute information.

Claim 26 recites a computer readable medium storing a computer readable program for providing three-dimensional model processing. The computer readable program includes providing an object displayed on a display means, providing an object tool representing the displayed object, wherein the object tool is adapted to be manipulated in three dimensions such that the position and orientation of the object tool can be changed, providing an editing tool adapted to be manipulated in three dimensions such that a relative position between the editing tool and the object tool can be changed, detecting relative position information corresponding to the relative position between the object tool and the editing tool, executing processing determined by the editing tool to modify attribute information of the displayed object on the basis of the detected relative position information, and updating the appearance of the displayed object based on the modified attribute information.

As further supported in the specification, the processor is configured to execute processing corresponding to a number of different types of editing tools. See, Specification, pg. 3. The processor recognizes the type of editing tool selected by the operator and adjusts modification of the object accordingly. See, Specification, pg. 11. Possible editing tools include a brush tool for executing fine coloring, a spray tool for executing rough coloring, and a microphone tool for executing sound. See, Specification, pg. 7, 20. The brush tool allows the operator to determine a color in advance. When the operator uses the brush tool, the processing determines the coloring range based on surface position and orientation information of the object and the position information of the tool. See, Specification, pg. 16-17. For the spray tool, the action range of the tool determines the area of the object which is modified. The intersection of the object with the action range of the activated spray tool determines the coloring range. See, Specification, pg. 17-18, and Fig. 15-17. The microphone tool allows sound output dependent on the distance of the tool from the object. A specific sound may be provided when the distance between the microphone tool and the object is below a predetermined value, or sounds may be altered depending on the orientation information of the object. See, Specification, pg. 20, and Fig. 19.

Thus, the processor configured to execute the appropriate modifications by the various editing tools allows extensive processing of the object in a variety of ways and also provides the operator with a feeling as if he actually handles the displayed object. See, Specification, pg. 21.

Applicants believe the cited art, even if combinable, is distinguishable from the claimed invention. For example, the primary Handley reference fails to provide the various editing tools of the claimed invention. The Patent Office states that color and sound modification is disclosed by Handley col. 43, lines 55-65. See, Office Action, pg. 3.

Contrary to the Patent Office's position, the purported color modification of Handley is merely a sketching function allowing the operator to draw in a color different than the background. See, Handley, col. 43, lines 44-65. The purported sound modification of Handley, which the Office Action alleges is a texture map related to sound, is merely a map of the surface textures associated with a graphic object. See, Handley, col. 43, lines 54-65. In the claimed invention, the processor is configured to execute the execute processing corresponding to a number of different types of editing tools, such as color and sound modification. As previously discussed, the claimed invention allows extensive processing of the object not obtained by the mere basic modification in Handley. Therefore, Handley fails to recognize the processing of the claimed invention, and thus, should be considered distinguishable on its own for at least these reasons.

Further, the Miwa reference, alone or even if combinable, cannot be relied on solely to remedy the deficiencies of Handley. With respect to Miwa, the Patent Office merely relies on this reference for its purported teaching of relative position information. See, Office Action, pg. 4-5. Therefore, even if combinable, Applicants do not believe that one skilled in the art would be inclined to modify the cited references to arrive at the claimed invention.

Based on at least these reasons, Applicants believe that the cited art is distinguishable from the claimed invention. Therefore, Applicants respectfully submit that the cited art, even if combinable, fails to disclose or suggest the claimed invention, and thus fails to render obvious the claimed invention.

Accordingly, Applicants respectfully request that the rejections with respect to claims 14-26 be withdrawn.

For the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY 

Thomas C. Basso

Reg. No. 46,541

P.O. Box 1135

Chicago, Illinois 60690-1135

Phone: (312) 807-4310

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